

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1. (Currently amended) A stent comprising:

a plurality of first loop containing sections arranged generally in a circumferential direction and spaced apart from one another, loops in said first loop containing sections occurring at a first frequency;

a plurality of second loop containing sections, loops in said second loop containing sections occurring at a second frequency that is higher than said first frequency, said second loop containing sections consecutively alternating with said first loop containing sections along a longitudinal axis of the stent, each of said second loop containing sections being alternately joined to longitudinally neighboring first loop containing sections ~~at every third loop of each said second loop containing sections~~ around the circumference of the stent,

said first loop containing sections and said second loop containing sections form a plurality of cells, wherein each cell ~~is formed from~~ consists essentially of one loop of the first loop containing section and three loops of the second loop containing section, and

said first loop containing sections provide radial support upon expansion of the stent and said second loop containing sections provide longitudinal flexibility of the stent.

Claim 2-4. (Canceled)

Claim 5. (Previously presented) The stent according to Claim 1, wherein each of said cells encompass about the same area.

Claim 6. (Canceled)

Claim 7. (Original) The stent according to Claim 1, wherein the relative width of each of said first loop containing sections is such that when said stent is crimped for insertion into a lumen of a blood vessel, each of said second loop containing sections are crimpable to essentially the same diameter as each of said first loop containing sections.

Claim 8. (Canceled)

Claim 9. (Original) The stent according to Claim 1, wherein said first loop containing sections and said second loop containing sections have struts, said first loop containing sections have wider struts than struts of said second loop containing sections.

Claim 10. (Previously presented) The stent according to Claim 9, wherein a strut of the second loop containing sections is shorter than another strut of the second loop containing sections.

Claim 11-12. (Canceled)

Claim 13. (Currently amended) A stent comprising:

a plurality of first circumferential bands containing a pattern of loops at a first frequency and disposed in phase relative to one another;

a plurality of second circumferential bands containing a pattern of loops at a second frequency higher than said first frequency, said second circumferential bands consecutively alternating with said first circumferential bands along a longitudinal axis of the stent, ~~every third loop of~~ said second circumferential band alternately joining to neighboring bands of said first circumferential bands, ~~wherein~~ said first circumferential bands and said second circumferential bands ~~form~~ forming a plurality of cells, wherein each cell ~~is formed from~~ consists essentially of one loop of said first circumferential band and three loops of said second circumferential band, and ~~wherein~~ said first circumferential bands are relatively adapted to provide radial support upon expansion of the stent and said second circumferential bands are relatively adapted to provide longitudinal flexibility of the stent.

Claim 14. (Original) The stent according to Claim 13, wherein each of the second circumferential bands have loops which are disposed in phase relative to one another.

Claim 15-17. (Canceled)

Claim 18. (Previously presented) The stent according to Claim 13, wherein each of said cells encompass about the same area.

Claim 19. (Canceled)

Claim 20. (Previously presented) The stent according to Claim 13, wherein the relative width of said first circumferential bands is such that when said stent is crimped for insertion into a lumen of a blood vessel, said second circumferential bands are crimpable to essentially the same diameter as said first circumferential bands.

Claim 21. (Canceled)

Claim 22. (Original) The stent according to Claim 13, wherein said first circumferential bands and said second circumferential bands have struts, said first circumferential bands have wider struts than struts of said second circumferential bands.

Claim 23. (Previously presented) The stent according to Claim 13, wherein a strut of the second circumferential band is shorter than another strut of the second circumferential band.

Claim 24-25. (Canceled)

Claim 26. (Currently amended) A stent ~~comprising~~ consisting essentially of:

a plurality of radially supporting generally sinusoidal bands arranged generally in a circumferential direction and spaced apart from one another;

a series of flexible connectors, each having a first end and a second end and a loop there between, said connectors coupling neighboring radially supporting generally sinusoidal bands along the longitudinal axis of the stent such that said first ends and said second ends of each flexible connector are consecutively and alternately joined to

each of said neighboring radially supporting sinusoidal bands around the circumference of the stent, wherein each loop of the generally sinusoidal bands facing an adjacent band is joined to two of said connectors to form a plurality of uniformly distributed cells.

Claim 27-28. (Canceled)

Claim 29. (Previously presented) The stent according to Claim 26, wherein each of said cells encompass about the same area.

Claim 30. (Canceled)

Claim 31. (Original) The stent according to Claim 26, wherein the relative width of said radially supporting sinusoidal bands is such that when said stent is crimped for insertion into a lumen of a blood vessel said flexible connectors are crimpable to essentially the same diameter as said radially supporting sinusoidal bands.

Claim 32. (Original) The stent according to Claim 26, wherein said radially supporting sinusoidal bands and said flexible connectors have struts, said radially supporting sinusoidal bands have wider struts than struts of said flexible connectors.

Claim 33. (Previously presented) The stent according to Claim 26, wherein a strut of the flexible connector is shorter than another strut of the flexible connector.

Claim 34-35. (Canceled)

Claim 36. (Original) The stent according to Claim 26, wherein said flexible connectors are generally Z-shaped segments.

Claim 37. (Currently amended) A stent comprising:

a plurality of first circumferential bands containing a pattern of loops at a first frequency;

a plurality of second circumferential bands containing a pattern of loops at a second frequency higher than said first frequency, consecutively alternating with said first circumferential bands and periodically coupled to form cells such that said first circumferential bands are joined together through said second circumferential bands without connection directly between said first circumferential bands,

wherein the loops of the first circumferential bands are in phase with each other, each cell ~~formed of~~ consisting essentially of one loop of the first circumferential band and three loops of the second circumferential band, the second circumferential band having at least one loop longitudinally shorter than another loop in the second circumferential band.

Claim 38. (Original) The stent according to Claim 37, wherein each of the second circumferential bands have loops which are disposed in phase relative to one another.

Claim 39-40. (Canceled)

Claim 41. (Previously presented) The stent according to Claim 37, wherein each of said cells encompass about the same area.

Claim 42. (Canceled)

Claim 43. (Original) The stent according to Claim 37, wherein the relative width of said first circumferential bands is such that when said stent is crimped for insertion into a lumen of a blood vessel, said second circumferential bands are crimpable to essentially the same diameter of said first circumferential bands.

Claim 44. (Canceled)

Claim 45. (Original) The stent according to Claim 37, wherein said first circumferential bands and said second circumferential bands have struts, said first circumferential bands have wider struts than struts of said second circumferential bands.

Claim 46. (Previously presented) The stent according to Claim 37, wherein a strut of the second circumferential band is shorter than another strut of the second circumferential band.

Claim 47-48. (Canceled)

Claim 49. (Currently amended) A stent comprising a plurality of cells, each of said plurality of cells consisting essentially of:

a first member having a first end and a second end;

a second member having a first end and a second end;

said first end and said second end of each of said first member and said second member include a curved portion with a substantially linear portion in between said first end and second end, said curved portion of said first end of said first member communicating with said curved portion of said first end of said second member forming a first loop;

a third member having a first end and a second end;

a fourth member having a first end and a second end;

a fifth member having a first end and a second end;

a sixth member having a first end and a second end;

a seventh member having a first end and a second end;

an eighth member having a first end and a second end; and

said first end and said second end of each of said third member, said fourth member, said fifth member, said sixth member, said seventh member, and said eighth member include a curved portion with a substantially linear portion in between said first end and second end, said curved portion of said second end of said second member communicating with said curved portion of said first end of said third member, said curved portion of said second end of said third member communicating with said curved

portion of said first end of said fourth member forming a second loop, said curved portion of said second end of said fourth member communicating with said curved portion of said first end of said fifth member forming a third loop, said curved portion of said second end of said fifth member communicating with said curved portion of said first end of said sixth member forming a fourth loop, said curved portion of said second end of said sixth member communicating with said curved portion of said first end of said seventh member forming a fifth loop, said curved portion of said second end of said seventh member communicating with said curved portion of said first end of said eighth member forming a sixth loop, said curved portion of said second end of said eighth member communicating with said curved portion of said second end of said first member.

Claim 50. (Original) The stent according to Claim 49, wherein said third member, said fourth member, said fifth member, said sixth member, said seventh member, and said eighth member each have a substantially identical length.

Claim 51. (Original) The stent according to Claim 49, wherein said third member, said fifth member, said sixth member, and said eighth member each have a length that is substantially identical, but longer than a length of said fourth member and said seventh member.

Claim 52. (Withdrawn) The stent according to Claim 49, wherein said third member, said fourth member, said sixth member and said seventh member each have a length that is substantially identical, but shorter than a length of said fifth member and said eighth member.

Claim 53. (Original) The stent according to Claim 49, wherein said first member, said third member, said seventh member and said eighth member are substantially parallel.

Claim 54. (Original) The stent according to Claim 49, wherein said second member, said fourth member, said fifth member, and said sixth member are substantially parallel.

Claim 55. (Original) The stent according to Claim 49, wherein the connection of said third member, said fourth member, and said fifth member form an overall shape that is substantially a mirror image of an overall shape formed by the connection of said sixth member, said seventh member, and said eighth member.

Claim 56. (Original) The stent according to Claim 49, wherein the connection of said third member, said fourth member, and said fifth member form an overall shape that is substantially reversed of an overall shape formed by the connection of said sixth member, said seventh member, and said eighth member.

Claim 57. (Cancel)

Claim 58. (Withdrawn) The stent according to Claim 49, wherein a substantial length of each of said third member, said fourth member, said fifth member, said sixth member, said seventh member, and said eighth member is substantially non-linear.

Claim 59. (Original) The stent according to Claim 49, wherein each of said first member and said second member have a relative width such that when said stent is crimped for insertion into a lumen of a blood vessel, each of said third member, said fourth member, said fifth member, said sixth member, said seventh member, and said eighth member

are crimpable to essentially a same diameter as said first member and said second member.

Claim 60. (Canceled)

Claim 61. (Previously presented) The stent according to Claim 49, wherein each of said first members and said second members is wider than a width of each of said third member, said fourth member, said fifth member, said sixth member, said seventh member, and said eighth member.

Claim 62. (Previously presented) The stent according to Claim 49, wherein at least one of said third member, said fourth member, said fifth member, said sixth member, said seventh member, and said eighth member is of a length that is shorter than a length of at least one other of said third member, said fourth member, said fifth member, said sixth member, said seventh member, and said eighth member.

Claim 63-86. (Canceled)